



SY18U

Engine power

14.6kW/2400rpm

Bucket capacity

* 0.04 m³

Operating weight

1925kg

-  Excellent Performance
-  Small and Flexible
-  Easy Operation
-  Economically

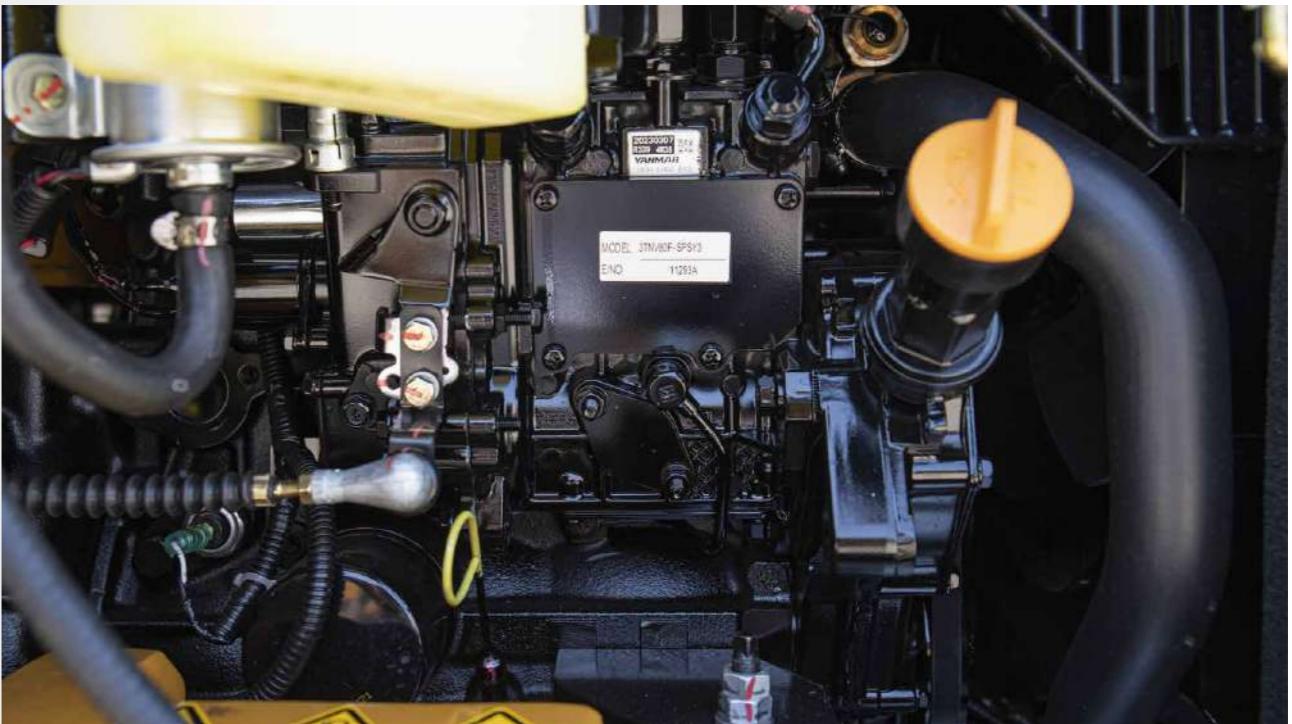


SANY HEAVY MACHINERY LTD

<http://www.sanyglobal.com>

This manual was printed in 2023. The product information may have been changed when you read it. Products (including specific configuration, detail, etc.) are based on the specific models and products applicable to markets outside China, which are displayed and sold by agents. For more details, please visit the local authorized agent of SANY Heavy Machinery Ltd.

* Bucket is optional



Strong power



SY18U is powered by a SANY-customized Yanmar 3TNV80F engine, delivering 14.6kW of power and meeting Stage V and Tier 4f emission standards. With robust and reliable performance, it caters to diverse power needs of customers.

Utilizing a cartridge-type high-precision oil-water separator, it effectively separates water while efficiently filtering impurities in the fuel, providing multiple protections for the engine and extending its lifespan.



Main pump



Master valve



Rotary motor



The hydraulic system adopts a high-torque main pump and a high-flow main valve to ensure efficient excavation and breaking operations.

Load-sensitive flow distribution system: It can provide and distribute flow according to the need of the system for flow, meeting the requirements of speed regulation and compound actions of executing components. Through hydraulic system optimization, precise engine matching ensures accurate and smooth control of machine operations.



Adjustable track frame to suit all your requirements and increase stability

When things get really tight, the SY18U makes itself very small – with a width of just 980 mm, it can even fit through a garden gate, a door opening or onto a trailer for transport.

If stability is required, the undercarriage can be hydraulically adjusted to a width of 1 350 mm. The dozer blade can also be adjusted to varying widths as needed.



Safe enhanced

Brand new upgrade of cab

Protection for people and machines

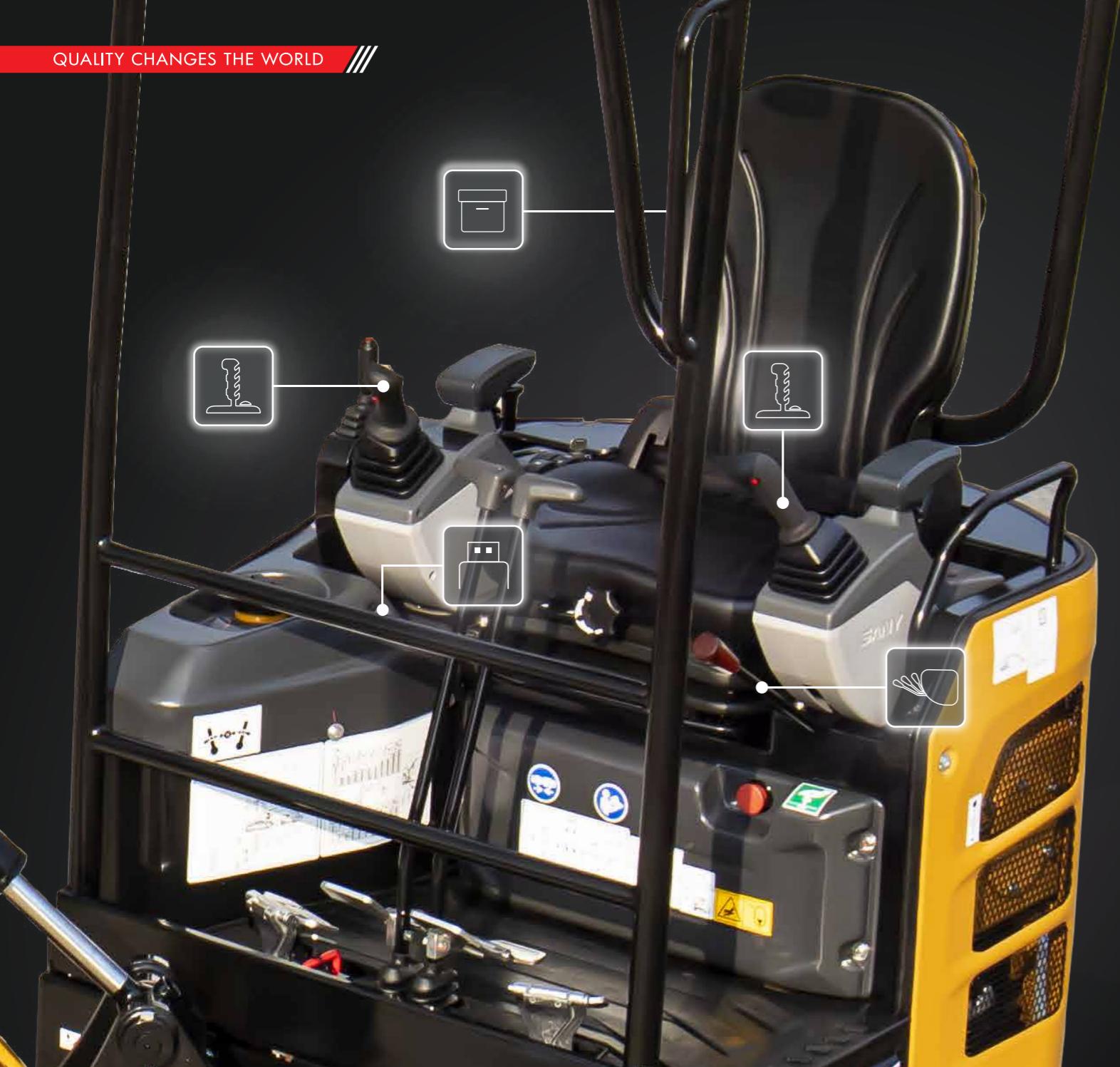
Thanks to the ROPS or FOPS-tested operator's platform, SANY's smallest model also performs well in terms of safety. To ensure that people and machines, tools and buildings and the environment are optimally protected, the standard equipment includes a battery disconnection switch and an emergency stop button. The travel alarm helps the operator to pay attention to their work during operation.

The individual that already has everything

The SY18C comes with many standard features that are highly beneficial. For instance, it includes LED work lights that ensure optimal visibility in any condition. Additionally, it boasts a sophisticated load-sensing hydraulic system, which provides precise power adjustment to meet specific operational needs.



*Some country configurations



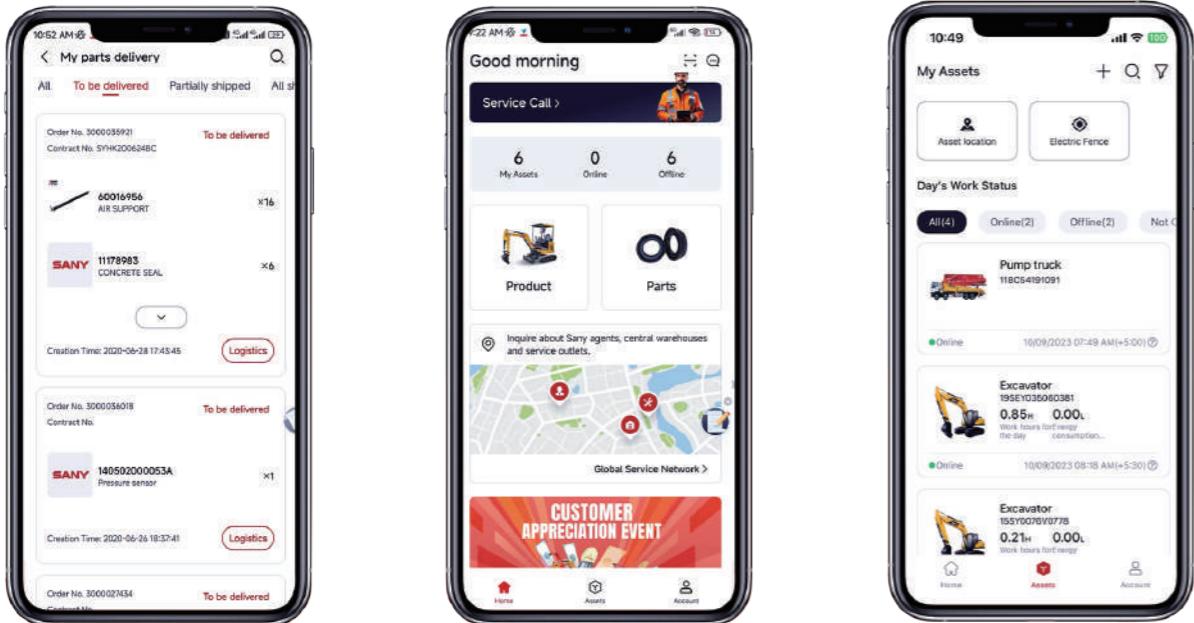
Upgraded Cab A Brand-new Experience

High-end suspension seat with adjustable armrest, ensuring comfortable operation. A cover for a key switch is equipped to prevent rainwater ingress. Additionally, the 12V power interface has been upgraded from a small hole to a universal larger hole, enhancing adaptability, and its position has also been adjusted for easier operation.



MySANY APP

Easy use, quick response



Quick Parts Access

- View parts manuals
- View parts availability
- Check equipment & parts order status

Fleet Management

- Check equipment working condition
- Monitor equipment energy consumption
- Set up e-fence

Streamlined Service

- One-click to initiate service request
- Check global service network
- View local service team's phone number & email



Scan to download!

Complete research & development and test system

SANY has established complete machine endurance test center with full functions. Each model of excavator must be subjected to over 2,000h field excavating test.

Key components like working device, cab and hydraulic components etc. must be subject to fatigue test over 800,000 times.



Advanced manufacturing technology

SANY has RGV assembling line and fullautomatic welding robots, and possesses high precision machining equipment and precise machining center.

SANY's manufacturing and assembling lines won five-star national site in 2013 and national quality award in 2014. In 2023, SANY Mini Excavator Factory was awarded as the intelligent factory.



Convenient maintenance

Electrical components are centrally installed, allowing for easy maintenance by simply opening the front cover.

Full-open covering parts enable maintenance and service directly from the ground, ensuring convenience and easy accessibility.

Air filters, oil-water separators, fuel filters, oil filters, fuse boxes, and other components are easily reachable, making maintenance exceptionally convenient.

Lubricating grease is added through a grease nozzle conveniently arranged on the same side as the excavator, ensuring easy lubrication and maintenance.



Technical specifications

Specification	Main performance		
Overall Weight	1925 kg	Traveling Speed	4.0/3 (km/h)
*Bucket Capacity	0.04 m ³	Gyration Speed	10 rpm
Engine	Yanmar 3TNV80F	Grade Ability	58%
Engine Power	14.6 kW/ 2400 rpm (SAEJ1995)	Ground Pressure	30 kpa
Main Pump Flow	66 L/min	Digging Force of Bucket	16.6 kN
Maximum Torque	65.3 Nm/ 1800 rpm	Digging Force of Arm	9.2 kN
Displacement	1.226 L		

Lifting capacities of lower dozer blade

	Load point height	Radius				Digging reach	
		1.5m	2.0m	2.5m	3.0m	Maximal	
	3.0m kg						*265 *265
	2.0m kg					*292 263	*255 225
	1.0m kg	*517 461	*415 333	*366 255	*256 193		
	0 kg	*662 *651	*774 425	*541 313	*414 245	*298 193	
	-1.0m kg	*999 *660	*650 422	*468 309	*342 243	*312 232	

Lifting capacities of upper dozer blade

Service Refill Capacities	Traveling part		
Fuel tank	21 L	Roller on each side	3
Hydraulic oil tank	21 L	Track width	230mm
Engine oil	3.4 L		
Antifreeze coolant	5.4 L		
Traveling reducer gear oil	2X0.33 L		

	Load point height	Radius				Digging reach	
		1.5m	2.0m	2.5m	3.0m	Maximal	
	3.0m kg						*265 *265
	2.0m kg					260 263	222 225
	1.0m kg	462 461	331 333	253 255	190 193		
	0 kg	*662 *651	425 425	311 313	242 245	190 193	
	-1.0m kg	*671 *660	423 422	307 309	240 243	229 232	

1. The lifting capacity is calculated in accordance with ISO10560 and SAEJ1097, where the limit coefficient of hydraulic system is 0.87 and tilting limit coefficient is 0.75;

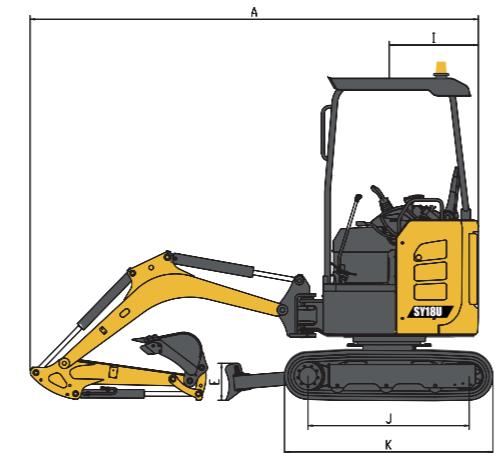
2. Item with * is limited by hydraulic pressure and item without ** is limited by stability;

3. Lifting point is front support hole of arm (excluding the weight of the bucket). It is necessary to deduct from the above lifting capacity if additional accessory is installed, such as bucket;

Machine dimensions

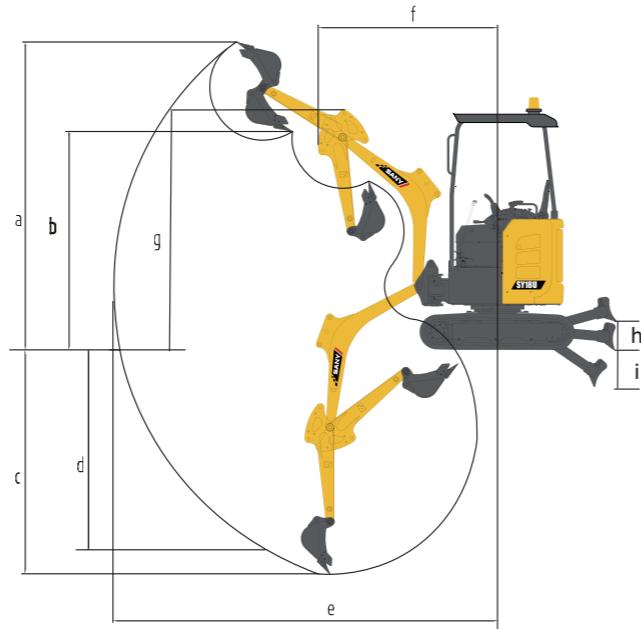
DIMENSIONS (TRANSPORT) (mm) SY18U

A. Total length (during transportation)	3515
B. Total width (during transportation/operation)	980/1350
C. Total height (during transportation)	2370
D. Upper width	980
E. Blade height	270
F. Width of standard track shoe	230
G. Track gauge (during transportation/operation)	750/1120
H. Minimum ground clearance	160
I. Gyration radius of tail	675
J. Grounding length of track	1220
k. Track length	1585



Working Area (mm) Arm 960/1160 SY18U

a. Maximum digging height	3410/3530
b. Maximum unloading height	2350/2475
c. Maximum digging depth	2385/2585
d. Maximum digging depth with vertical boom	2100/2205
e. Maximum digging radius	4010/4135
f. Minimum gyration radius	1705/1715
g. Max. height at Min. gyration radius	2550/2545
h. Maximum lifting height of blade	310
i. Maximum lowering depth of blade	320
rh/lh. Maximum bucket offset	400/625



Standard configuration

Engine	Hydraulic system	Cab
3TNV80F	• Pilot switch control lever	• Retractable seatbelt
12V-55A Alternator	• Single/double acting switch valve	• Adjustable suspension seat
21L fuel tank	• Accumulator	• Foot rest, floor mat
	AUX1 lines	•
	Hydraulic oil cooling	•
	21L hydraulic oil tank	•
Lower traveling body	Electrical control system	
230mm wide rubber tracks	•	12V power interface
Two-speed travel	•	Main power switch
Retractable lower assembly	•	
Alarm system	Others	
Engine oil pressure is too low	•	60Ah battery
The fuel level is too low	•	Lockable rear engine cover
Coolant temperature is too high	•	Travel direction markings on traveling frame
		Working indicator
Optional accessories	Monitoring system instrument	
Arm 1160mm	○	Hour gauge, fuel tank level gauge
Steel tracks	○	Engine coolant temperature
0.04m³ bucket	○	
AUX2 lines	○	
Quick coupler lines	○	

• stands for standard configurations ○ stands for optional configurations